DAILY FIELD ACTIVITY REPORT

PROJECT NAME: Pre-Remedial Design Investigation and Baseline Sampling, Portland Harbor Superfund Site

DATE: June 30, 2018	**WEATHER:** Overcast, High ~75 degrees F

Personnel and Visitors Onsite:
Research vessel Methow – CDM Smith: Jennifer Jones; Geosyntec: Erin Dunbar; Gravity Marine: Mike Duffield, Peter Jenkins; AECOM: Stu Holmes
Research vessel Cayuse – CDM Smith: Mary Lou Fox; Geosyntec: Alison Clemens; Gravity Marine: John Schaefer, Maggie McKeon; AECOM: Mark Taucher

Planned Activity:

- Collect surface sediment samples at Downtown/Upriver locations.

Activity Completed:
A tailgate safety meeting was led by AECOM. Topics discussed during the safety meeting included fatigue, hydration, and overhead activities and hazards associated with site conditions. Since this is the weekend and Fourth of July holiday is coming up, the river may be crowded and boat wakes are more likely.

Jennifer Jones performed oversight of surface sediment sampling from 08:00 to 18:00 on board the Methow. Specific activities completed by the AECOM/Geosyntec team, with vessel support from Gravity Marine, are as follows:

- Position check at PH-2 indicated that the vessel GPS was reading within 1.2 meters of the PH-2 survey coordinates, meeting the 1-2 m accuracy specification in the FSP.
- 3-point composite surface sediment samples were collected from 4 baseline locations near RM 14.5 in the Upriver reach as summarized below. Activities included decontamination of sampling equipment using Alconox and deionized/distilled water and housekeeping of the sampling area

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Mary Lou Fox performed oversight of surface sediment sampling from 08:00 to 18:00 on board the Methow. Specific activities completed by the AECOM/Geosyntec team, with vessel support from Gravity Marine, are as follows:

- Position check at PH-2 indicated that the vessel GPS was reading within 1.3 meters of the PH-2 survey coordinates, meeting the 1-2 m accuracy specification in the FSP.
- 3-point composite surface sediment samples were collected from 5 baseline locations from RM 14.5 to RM 14.75 in the Upriver reach as summarized below. Activities included decontamination of sampling equipment using Alconox and deionized/distilled water and housekeeping of the sampling area.

Status of Schedule & Priority Work:

- Sampling will continue into next week at Downtown/Upriver locations.

Issues/Concerns/Resolutions (include work performed that was not planned or anticipated):
At SG-B446, six grabs were attempted; only 3 with any recovery: (14, 13, and 14 cm), which were composited into a sample.
At SG-B447, sampling location was near the shore and substrate consisted of large rocks, indicating Bin 4 protocol applied. Six attempts were made with no recovery. Since the vessel could not move closer to shore and find soft sediment, the vessel was moved laterally along shore toward the location where soft sediment had been found previously (March 2018). The probe was used at 6 locations moving 25 feet each time, until soft sediment was located and this became Alt 1. Three grabs were collected with recovery >20 cm, which were composited into sample.
At SG-B450, first grab was sieved and determined to be less than 35% fines (around 20%). Substrate Bin 3 protocol was applied, and 5 grabs were taken at which point 3 grabs with recovery >20 cm were obtained to collect a sample to be archived. The Pre-RD Group plans to return to this location tomorrow to probe for softer (mud) substrate to collect a sample with at least 35% fines. Would then discard the sample collected here today.
At location SG-B443, seven grabs were taken with three grabs yielding sediment recoveries of 17, 13, and 20 cm sediment. The location was classified as Bin 2. Sticks and/or rocks were in the sampler jaws for four of the grabs, preventing good sediment recoveries.
At location SG-B451, seven grabs were taken with three grabs yielding sediment recoveries of 22, 10, and 23 cm sediment. The location was classified as Bin 2. Sticks and/or rocks were in the sampler jaws for four of the grabs, preventing good sediment recoveries.

Samples Collected, Measurements Made, Photographs: (List Locations, Matrix & Sample type):
On the Methow, sediment samples were collected at the following sampling locations:

- PDI-SG-B446 –within 25-FT radius, RM 14.5, clayey silty, no odor or sheen. Three of a total of 6 grabs has sufficient recovery (14, 13, and 14 cms). Several small freshwater snails (Juga sp.?) observed in grab and 1 macroinvertebrate.
- PDI-SG-B447- RM 14.75 Alternate location 1 was sampled (3 grabs within 25 feet of Alt 1), following protocol for Substrate Type 4 (large rocks at primary location and no recovery with 6 grab attempts). Probed for soft sediment moving laterally toward area where soft sediment was previously found. Sample material was sandy silt, no odor or sheen.
- PDI-SG-B449 –within 25-FT radius, RM 14.9, fine sandy silt, no odor or sheen

- PDI-SG-B450* – within 25 FT radius, RM 14.8, silty sand, no odor or sheen. *This sample was archived pending additional attempt to obtain >35% fines at this location tomorrow.

On the Cayuse, sediment samples were collected at the following sampling locations:

- PDI-SG-B443 – RM 14.5 E, within 50-FT radius, silt with trace fine sands to silty sand
- PDI-SG-B444 – RM 14.5 E, within 25-FT radius, very soft silt with trace fine sands
- PDI-SG-B448 – RM 14.7 E, within 50-FT radius, very dark gray silt with trace sands
- PDI-SG-B451 – RM 14.75 E, within 50 FT radius, very soft silt to silty sand
- PDI-SG-B455 – RM 14 E, within 25-FT radius, very soft sandy silt

Note: Sediment descriptions are simplified and AECOM/Geosyntec provided more detailed sediment descriptions in their sampling notes. Trace components are not included in simplified descriptions unless related to sheen or biota.

Photographs of work were taken throughout the day and provided to EPA via email. Additional photos were taken and archived with a description included in the photolog Excel spreadsheet, which are maintained electronically in the ProjectWise project folder.

Borings Completed (Include total footage drilled for each boring):
None

Wastes Generated and How Handled:

- Excess sediment and debris from today's sampling activities was rinsed back into the river per the FSP. No sheen was observed today.
- Disposable gloves, paper towels, and other general trash was containerized in a trash bag and removed daily for disposal to a municipal waste management dumpster.

Health and Safety Issues, Equipment Needs, Staffing:
None observed

Signature: Jennifer Jones, Mary Lou Fox **DATE** June 30, 2018